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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/775,643

Applicant(s)

CRONIN ET AL.

Examiner

Shaun Sensenig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to papers filed on July 28, 2008.

Claims 1-4, 14-17, 23, 26, 28, and 29 have been amended.

Claim 30 has been cancelled.

Claims 1-29 are pending.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. To be considered statutory, claimed subject matter requires four things:

(1) the claimed subject matter *must* lie within the ambit of the *four classes* of statutory subject matter enumerated in 35 U.S.C. 101, those being any new and useful *process, machine, manufacture, or composition of matter*;

(2) the claimed subject matter *must not* fall within any of the *three categories* of statutory subject matter *exceptions* enumerated by the courts, those being, *in the absence of any practical application: abstract ideas, laws of nature, and natural phenomena*;

(3) any *practical application* of one of the three *otherwise nonstatutory categories of exceptions must not preempt* the underlying abstract ideas, laws of nature, or natural phenomena by *foreclosing others from substantially all other*

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practical applications of the *same* abstract ideas, laws of nature, or natural phenomena; *and*,

(4) any *practical application* of one of the three *otherwise nonstatutory* categories of exceptions *must* be evidenced in at least one of two possible ways:

(a) by transforming an article or physical object to a different state or thing; or,

(b) by otherwise producing any useful, concrete, and tangible result.

See MPEP §2106(IV).

3. Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-30 fail to satisfy the fourth, and thus the second, requirements for statutory subject matter eligibility because they are considered to be drawn merely to the production and/or manipulation of non-functional descriptive material, effecting no “useful, concrete, and tangible result.” It has been held that such claims, even if the non-functional descriptive material is claimed in combination with a computer-readable medium, are considered to comprise non-statutory subject matter, for merely manipulating an abstract idea. *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsanjani ("Service Provider: A Domain Pattern and its Business Framework Implementation") in view of Shi et al. ("A survey of manufacturing flexibility: Implications for e-business flexibility") (hereafter referred to as Shi) .**

In regards to **Claim 1**, Arsanjani discloses:

A method of designing and building an e-business system comprising: identifying one or more domains, each said domain identifying a functional area to consider when designing the e-business system, and comprising a list of one or more patterns that identify software components associated with the domain; generating an intermediate set of patterns having selected patterns from said one or more domains; and combining patterns in said intermediate set of patterns to produce a multi-domain pattern, said multi-domain pattern defining components of said e-business system. (page 1 and page 6)

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Arsanjani does not explicitly disclose hardware components in conjunction with the software components, however Shi teaches the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances. **(page 2, ¶ 2 and 3, shows that process takes advantage of hardware and software advances, and that the flexibility created by those advances is used in creating new business models by linking isolated domains)**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Arsanjani so as to have included the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances taught by Shi in order to increase efficiency and ease of use in creating e-business systems by incorporating both hardware and software aspects into one building process, since doing so could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results. In regards to **Claim 2**, Arsanjani discloses:

A method of designing and building an e-business system wherein said selected patterns are selected according to a first set of one or more criterion. (page 1 and page 6)

In regards to **Claim 3**, Arsanjani discloses:

A method of designing and building an e-business system further comprising progressively refining said intermediate set of patterns according to a second set of one or more criterion. (page 1 and page 6)

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In regards to **Claim 4**, Arsanjani discloses:

A method of designing and building an e-business system wherein said second set of one or more criterion is narrower than said first set of one or more criterion. (page 1 and page 6)

In regards to **Claim 5**, Arsanjani discloses:

A method of designing and building an e-business system wherein one of said domains comprises a security domain. (page 1 and page 6)

In regards to **Claim 6**, Arsanjani discloses:

A method of designing and building an e-business system wherein one of said domains comprises a functional domain. (page 1 and page 6)

In regards to **Claim 7**, Arsanjani discloses:

A method of designing and building an e-business system wherein one of said domains comprises a performance domain. (page 1 and page 6)

In regards to **Claim 8**, Arsanjani discloses:

A method of designing and building an e-business system wherein said one or more patterns having domain specific information comprise business security patterns.

In regards to **Claim 9**, Arsanjani discloses:

A method of designing and building an e-business system wherein said one or more patterns having domain specific information comprise eBusiness patterns. (page 1 and page 6)

In regards to **Claim 10**, Arsanjani discloses:

A method of designing and building an e-business system further

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comprising storing said intermediate set of patterns in a database. (page 1 and page 6)

In regards to **Claim 11**, Arsanjani discloses:

A method of designing and building an e-business system further comprising implementing said e-business system according to said multi-domain pattern. (page 1 and page 6)

In regards to **Claim 12**, Arsanjani discloses:

A method of designing and building an e-business system wherein said multi-domain pattern defines one or more hardware components in said e-business system. (page 1 and page 6)

In regards to **Claim 13**, Arsanjani discloses:

A method of designing and building an e-business system wherein said multi-domain pattern defines one or more software components in said e-business system. (page 1 and page 6)

In regards to **Claim 14**, Arsanjani discloses:

A method of designing and building an e-business system comprising: identifying a plurality of domains, each said domain identifying a functional area to consider when designing the e-business system, and comprising a list of one or more patterns that identify software components associated with the domain; selecting a first set of patterns from one or more said domains based on a first set of one or more criterion; selecting a second set of patterns from said first set of patterns based on a second set of one or more criterion, said second set of one or more criterion being narrower in scope than said first set of one or more

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criterion; and generating a multi-domain pattern based on said second set of patterns, said multi-domain pattern defining one or more software components for one or more of the domains of said e-business system. (page 1 and page 6)

Arsanjani does not explicitly disclose hardware components in conjunction with the software components, however Shi teaches the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances. **(page 2, ¶ 2 and 3, shows that process takes advantage of hardware and software advances, and that the flexibility created by those advances is used in creating new business models by linking isolated domains)**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Arsanjani so as to have included the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances taught by Shi in order to increase efficiency and ease of use in creating e-business systems by incorporating both hardware and software aspects into one building process, since doing so could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results. In regards to **Claim 15**, Arsanjani discloses:

A method of designing and building an e-business system wherein one of said first and second set of one or more criterion comprises set of one or more criterion representative of a customer's requirements. (page 1 and page 6)

In regards to **Claim 16**, Arsanjani discloses:

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A method of designing and building an e-business system wherein one of said first and second set of one or more criterion comprises criteria representative of industry regulations. (page 1 and page 6)

In regards to **Claim 17**, Arsanjani discloses:

A method of designing and building an e-business system comprising storing said first and second set of one or more criterion in a database. (page 1 and page 6)

In regards to **Claim 18**, Arsanjani discloses:

A method of designing and building an e-business system further comprising storing said first and second sets of patterns in said database after said first and second sets of patterns are selected. (page 1 and page 6)

In regards to **Claim 19**, Arsanjani discloses:

A method of designing and building an e-business system wherein selecting a first set of patterns from one or more said domains comprises displaying potential conflicts between said patterns in said first set of patterns. (page 1 and page 6)

In regards to **Claim 20**, Arsanjani discloses:

A method of designing and building an e-business system wherein generating said multi-domain pattern comprises combining said second set of patterns. (page 1 and page 6)

In regards to **Claim 21**, Arsanjani discloses:

A method of designing and building an e-business system wherein combining said second set of patterns comprises associating components of said

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second set of patterns in a file stored in a database. (page 1 and page 6)

In regards to **Claim 22**, Arsanjani discloses:

A method of designing and building an e-business system further comprising implementing said e-business system according to said multi-domain pattern. (page 1 and page 6)

In regards to **Claim 23**, Arsanjani discloses:

A system for designing and building an e-business system comprising: a server; a database communicatively linked to said server; and a controller communicatively linked to said server and said database, said controller adapted to: display one or more domains to a user, wherein each said domain identifies a functional area to consider when designing the e-business system, and includes a list of one or more patterns that identify software components associated with the domain; generate an intermediate set of patterns having selected patterns from said one or more domains according to a predetermined set of one or more criterion; and combine patterns in said intermediate set of patterns to produce a multi-domain pattern that defines one or more software components for one or more of the domains of the e-business system. (page 1 and page 6)

Arsanjani does not explicitly disclose hardware components in conjunction with the software components, however Shi teaches the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances. **(page 2, ¶ 2 and 3, shows that process takes advantage of hardware and software advances, and that the flexibility**

created by those advances is used in creating new business models by linking isolated domains)

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Arsanjani so as to have included the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances taught by Shi in order to increase efficiency and ease of use in creating e-business systems by incorporating both hardware and software aspects into one building process, since doing so could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

In regards to **Claim 24**, Arsanjani discloses:

A system for designing and building an e-business system further comprising a workstation communicatively linked to said server and said database. (page 1 and page 6)

In regards to **Claim 25**, Arsanjani discloses:

A system for designing and building an e-business system wherein said controller is further adapted to display potential conflicts between said selected patterns. (page 1 and page 6)

In regards to **Claim 26**, Arsanjani discloses:

A system for designing and building an e-business system wherein said controller is further adapted to store said predetermined set of one or more criterion in said database. (page 1 and page 6)

In regards to **Claim 27**, Arsanjani discloses:

A system for designing and building an e-business system wherein said controller is further adapted to store said intermediate set of patterns in said database. (page 1 and page 6)

In regards to **Claim 28**, Arsanjani discloses:

A controller configured to: display one or more domains to a user, wherein each said domain identifies a functional area to consider when designing an e-business system, and includes one or more patterns that identify software components associated with the domain; generate an intermediate set of patterns having selected patterns from said one or more domains according to a first set of one or more criterion; and combine patterns in said intermediate set of patterns to produce a multi-domain pattern that one or more software components for one or more of the domains of the e-business system. (page 1 and page 6)

In regards to **Claim 29**, Arsanjani discloses:

A controller configured wherein said controller is further adapted to progressively refine said intermediate set of patterns according to a second set of one or more criterion, said second set of one or more criterion being narrower than said first set of one or more criterion. (page 1 and page 6)

Arsanjani does not explicitly disclose hardware components in conjunction with the software components, however Shi teaches the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances. **(page 2, ¶ 2 and 3, shows that process takes advantage of hardware and software advances, and that the flexibility**

created by those advances is used in creating new business models by linking isolated domains)

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Arsanjani so as to have included the building of e-business solutions through the linking of isolated domains that take advantage of hardware and software technology advances taught by Shi in order to increase efficiency and ease of use in creating e-business systems by incorporating both hardware and software aspects into one building process, since doing so could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Response to Arguments

1. Applicant's arguments filed July 28, 2008 have been fully considered but they are not persuasive.

I. Rejection of Claims 1-22 under 35 U.S.C. §101

Applicant argues that the method claims are statutory because "domains" and "patterns" incorporate technology components (i.e. hardware and software). However, the material that links "domains" and "patterns" to technology components is not contained in the positively claimed material. Therefore, the steps such as "identifying", "generating", "selecting" and "combining" could be performed by a purely mental process.

II. Rejection of Claims 1-29 under 35 U.S.C. §102

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Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun Sensenig whose telephone number is (571) 270-5393. The examiner can normally be reached on Monday to Thursday 7:30 to 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571)272-6812. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S./
Examiner, Art Unit 3629
October 3, 2008

/John G. Weiss/
Supervisory Patent Examiner, Art Unit 3629